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(72) Inventor: Mingrino, Fabio
10128 Torino (IT)

(74) Representative: Quinterio, Giuseppe et al
c/o JACOBACCI & PERANI S.p.A.
Corso Regio Parco, 27
10152 Torino (IT)

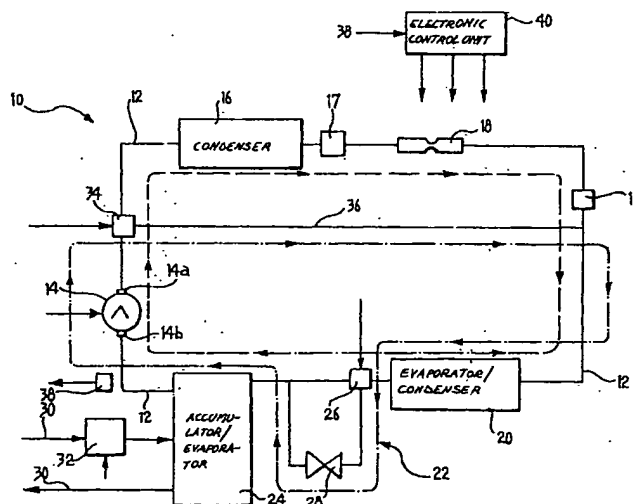
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(71) Applicant: FIAT AUTO S.p.A.
10135 Torino (IT)

(54) A system for airconditioning the passenger compartment of a vehicle

(57) The system (10) comprises a circuit (12) in which a working fluid is subjected to a thermodynamic cycle and a by-pass duct (36) that has one end connected between the compressor (14) and the condenser (16) and the other end connected to the input of the heat exchanger (20). Switching solenoid valves (26,34,19) adopt a first and a second operative condition in which the by-pass duct (36) is excluded from and connected in the circuit (12), respectively, so that, in the first condition, the system (10) operates as a cooling system and the heat exchanger (20) acts as an evaporator and, in

the second condition, the system (10) operates as a heating system with a heat pump and the exchanger (20) acts as a condenser. A further heat exchanger (24) is interposed between the heat exchanger (20) and the intake of the compressor (14) and can act, in the first and second operative conditions of the solenoid valves (26,34,19), respectively, as an accumulator for the working fluid in the liquid state, and as an evaporator. The further heat exchanger (24) is connected to the liquid engine-coolant circuit (30) by means of a variable-flow solenoid valve (32).



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EUROPEAN SEARCH REPORT

Application Number
EP 00 12 7661

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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Place of search		Date of completion of the search	Examiner
THE HAGUE		11 May 2001	Topolski, J
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**ANNEX TO THE EUROPEAN SEARCH REPORT
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82